

## PATENT ABSTRACTS OF JAPAN

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(71)Applicant : NIPPON DEMPA KOGYO CO LTD

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(72)Inventor : NAKAMURA JUNICHIRO  
NAKANO KOJI

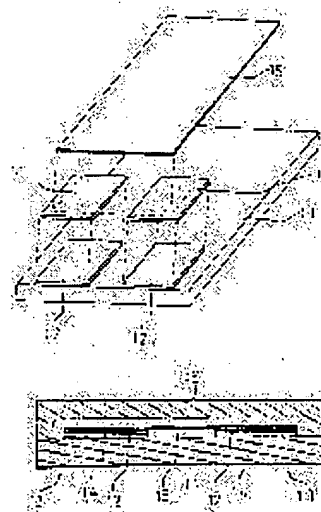
### (54) SURFACE MOUNTING TYPE PIEZOELECTRIC OSCILLATOR

#### (57)Abstract:

PURPOSE: To improve the impact resistance, the resonance characteristic and the aging characteristic by folding a metallic plate in two to stick it to a holding electrode formed on the plate surface of a base made of an insulating material and holding a crystal piece provided with an electrode on the plate surface and airtightly enclosing this base with a cover together with the crystal piece.

CONSTITUTION: A holding electrode 12 is formed on the upper face of a base 11 made of an insulating material, and a metallic plate 14 folded in two is stuck on the holding electrode 12, and the end part of a crystal piece 15 is placed and stuck on the metallic plate 14.

The upper face of the base 12 is covered with a cover 16 and is airtightly enclosed. Though an impact from the external acts on the base or the base 11 is thermally expanded by the change of temperature, its stress does not directly reach the crystal piece 15 because the metallic plate 14 folded in two functions as a buffer material. Thus, a piezoelectric oscillator is obtained which is superior in impact resistance and has a satisfactory resonance characteristic and is superior in aging characteristic.



#### LEGAL STATUS

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